

Electrical Work

Critical controls are designed to prevent electrocution, fire and explosion from uncontrolled electrical energy.

Job Planning

1. Live electrical work, other than testing, or proving dead, is prohibited unless approved by exemption.
2. Work on LV and HV electrical equipment must only be carried out by an authorised electrical worker (i.e. electricians, installers, instrument technicians, communication technicians) working under their required competencies and relevant licences in accordance with electrical and safety regulations.
3. An **arc flash study** is required when working on/near a **high-risk electrical circuit** to determine the **arc flash boundary** and **PPE requirements**.
4. Live electrical circuits are identified and isolated where possible before penetrating surfaces (walls, flooring and roofing).

Plant & Equipment

5. All electrical equipment (including test leads) must be inspected for damage before use.
6. All portable electrical equipment must be tested and tagged.
7. All non-portable electrical equipment not protected by Residual Current Devices must be regularly inspected and tested by a competent person in accordance with Original Equipment Manufacturers (OEM) requirements or at least every 3 years.
8. Residual Current Devices are required for:
 - high risk fixed electrical equipment / installations;
 - all tools connected to power circuits.

Site Set Up

9. Temporary electrical works are installed, tested and certified in accordance with the applicable standard.
10. When working near Overhead Live Equipment (OHLE) regulated safe working distances/ exclusion zones are identified and maintained.
11. When working near live low voltage equipment, barriers shall be installed to prevent inadvertent contact and the requirements of the Arc Flash Study implemented when required.

On the Job Protection

12. All temporary electrical leads must be protected from water immersion and damage.